



Chelmsford Amateur Radio Society

Newsletter

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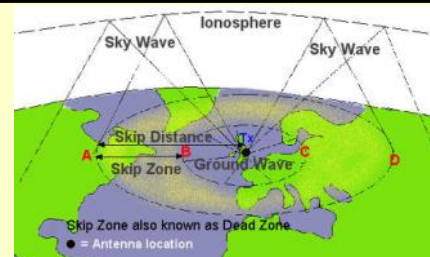
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November meeting:

3rd November 2015 - 7.30pm, Oaklands Museum

5 MHz Beacon Measurements, NVIS Maximum Operating Frequency and NVIS Propagation Predictions

Talk given by Dr. Marcus Walden, G0IJZ



Inside this issue:

Editorial
Dates for your diary
Committee listing
AGM outcome



Model & Steam Day report
Keeping in touch
Members' Ads
Resonance
A shocking experience
Intermediate Practicals
Exam information

Club Nets - Tuesdays 20:00h
Net Controller: Carl, G3PEM

#2 - GB3DA 10th Nov.
#3 - GB3ER 17th Nov.
#4 - 80m 24th Nov.
3.756MHz
#5 - 160m n/a
1.947MHz

Essex Ham Net
Mondays 20:00h GB3DA



Contact details for the newsletter: editor@g0mwt.org.uk

Editorial

Hello, and welcome to the 596th edition of CARS Newsletter. As a new kid on the block, I thought I would introduce myself before I got stuck into freshly defacing this long standing tradition. I passed the RAE in June 1976 and got the call G8MDS in August '76, then passed the Morse test in May '77 (certificate no. 4496, apparently). I joined the RSGB in April '77 but let the membership lapse after I became inactive on the air sometime in the '80s. For a while, I taught the City & Guilds RAE syllabus in Crawley, first as a 'holiday replacement' and then as a permanent post when the then incumbent moved out of the area.

My career in both the defence and commercial electronics industries has been much varied, and interesting, taking in such disciplines as intrinsically safe mine communications, marine radar, antennas, semi-conductor modelling for circuit simulation & microwave interferometry, to name but a few.

Amateur radio was instrumental in me changing my job from the foundry industry to electronics quite late in life. I started anew at rock bottom as a radio tester on the Clansman Line and it took me a while to catch up with my contemporaries. After six months or so of a rapid and steep learning curve, I moved into Avionics development and then, a few years later, into more general HF radio development. I moved to Chelmsford in 1994 to work for the infamous GEC-Marconi empire – a position that I found I could not reconcile with my future sanity, so I moved on again shortly afterward.

After retirement, and after many years of saying I would do one day, I returned to the hobby in August 2014, when my brother mentioned he had an old TS-430s he was no longer using and I thought it best to relieve him of it. I joined CARS and re-joined the RSGB almost immediately thereafter.

I have previously edited a newsletter for a local motorcycle club, so had 'form' in that area and, as Alan was looking for a replacement, I volunteered for the post if there was to be no-one else in the club who wanted the job!

Steve, G4GHO, aka **Ed**.

Dates for your diary

Please note, the dates may be subject to change...

3rd November

Club night

5 MHz Beacon Measurements, NVIS Maximum Operating Frequency and NVIS Propagation Predictions. Synopsis: Presentation is in four parts covering the following topics:
Part 1 - The 5 MHz Beacon Network. Part 2 - NVIS maximum operating frequency
Part 3 - Optimum working frequency. Part 4 - Comparison of 5 MHz beacon measurements with HF NVIS propagation predictions (VOACAP and ASAPS)

16th November Skills Night - Danbury Village Hall, CM3 4NQ

18/25th November Intermediate Practicals Workshop at Waters & Stanton. See page 22 for details.

1st December Meeting - 'Xmas Social & Quiz' - by CARS Members

7th December Advanced Course Examination at Danbury Village Hall

2016 - Schedule

5th January Meeting - 'Meteor Detection using 2m Amateur Radio' - Peter Meadows, M0ZBU

16th January Six week Foundation course begins. See www.g0mwt.org.uk/training

2nd February Meeting - 'Satellites' - Steve Hedgecock M0SHQ

1st March Meeting - 'Planning Permission' - Peter Davies M0PSD

5th April Meeting - '2MT Writtle - The Birth of British Broadcasting' - Tim Wander, G6GUX

Chelmsford Amateur Radio Society AGM - 6th October 2015

By Chris, G0IPU

The Society met at Oaklands Museum for the AGM and was well attended by the membership. Starting on time, Carl Thomson, G3PEM the retiring President, opened the meeting with a well presented year in brief report and obituaries to both Clive Ward, G1EUC and Geoff Mills, G3EDM. This was followed by a one minute silence to reflect on the good work Clive & Geoff had given to the society and Amateur Radio.

The Year Raffle: Chris, G0IPU won that to his surprise - two book vouchers for the RSGB book shop.

Carl then presented the 'Amateur Of The Year' certificate which was presented, posthumously this year, to Clive Ward G1EUC. The committee had previously suggested this and when Carl asked the assembled membership for a proposer, Richard G7OED responded with the membership agreeing unanimously.

Constructors' Competition: In fourth place, the 'first-timers prize' was awarded to Steve G4HSK in his absence for his 10M-144MHz transverter. In third place was Peter, G3SUY (also absent) for his mobile whip. In second place was Bruce, M0XBS with a valve audio amplifier and in first place was Charlie, M0PZT (also absent) with a logging program called PZTLog.

Carl then commented on his presidency and the five years he had been in post, also thanking the committee and training team for their work. In closing, Carl thanked everyone for supporting him.

In conclusion, Carl read an item written by a past president, Roy, G3PMX in an old newsletter from 1982, reminding us why the club is a hobby Club/Society, run by volunteers, where all can help in the running of the Society by contributing in a constructive way, including criticism backed with constructive suggestions. Referencing the many activities the club put on for the membership to attend, Carl indicated that we need to encourage the newer licensed members into the activities as some are not so well represented by the membership.

Committee Officer's Reports

Chairman's Report: This was begun by Chris thanking everyone for their hard work on the committee, saying that he had been on and off the committee for years, but this term will be the last. Then a brief report on the year's meetings and outside events, kept quite short, not wishing to detract from the later presentation by John, G8DET. All in all, a very busy year with a full meeting calendar and several outside events; for example: RNLI fund raising, Galleywood Common, Sandford Mill and the Museum of Power.

Treasurer's Report: Peter, M0PSD opened his report by reminding that he had only been in post since May. The accounts had been audited and all was well and a summary was available to all attending members for approval. Room hire has increased from £80 to £82, not a huge increase, but still an increase. An RNLI cheque was reissued as the first one was not banked by them, and the Society also gave a further £50 donation. Peter then went on to mention £187.50 that came in to the Society before he became treasurer. New equipment and flight cases have been purchased and there was a display board showing pictures of the new equipment so all could see where the money had gone. There was one repair to the equipment that came to £58.80. £20 on Ofcom for licence transfer. Peter then mentioned the Training income/costs minus the hall hire. Raffle income. Membership fee remained at £15 and Paypal is now an added method of paying along with cash and cheque. Paypal is also available for the payment of Training fees. The Society's asset list is in the process of being updated to reflect the value of the asset held by the club. The accounts were duly proposed by Tony, G4YTG seconded by Carl, G3PEM and accepted by the membership with a show of hands.

Training & Skills Report

The training report was given by Murray, G6JYB and reflected on the passing of Clive in his relentless pursuit of new candidates. Since starting the training team back in 2001, over 300 people have entered the hobby via CARS and the training team, with over 500 exams being taken, upgrading licences from Foundation, through Intermediate and then on to Advanced. Murray went on to give the year format for the courses, with the introduction of 'practicals only' for the Intermediate licence. Training is still in demand, even though other clubs have started doing their own.

Peter, M0PSX then took the floor for the Skills report and started by asking the assembled membership "who's been to Skills?" Everyone there raised a hand. Skills night is a training team initiative by Peter, M0PSX to promote Amateur Radio to the newer licensed amateur as a 'what's next?' approach. Its broad appeal attracts all-comers from the long standing, to the newly licenced and SWLs. A questionnaire was used to assess what was required and, although Microwave was the toughest to get on the agenda, it was achieved. Attendee numbers (Peter admits he likes his numbers) since last October: 167 attendees had callsigns but, including SWLs, the total number will be higher. There were 61 Foundation/Intermediate attendees at the Skills nights (36%). An average of 61 people attend, with 74 being the highest to date. The Skills night is open to all members and non-members alike and attracts visitors from all round Essex, London, Hertfordshire Kent, Cambridge, Suffolk and Norfolk (and now Dorset—Ed.) Peter then mentioned a new RSGB initiative called 'Inspire' that will be rolled out over the next month or two. He finally thanked the many who have helped on the Skills nights.

Peter, M0PSD has agreed to be the Exam Secretary in light of Clive's passing. Murray concluded with a short precis of our current commitments and training team academic calendar, which can be seen on the training team's web page.

Questions from the floor were taken next regarding new member attendance to Skill's Night and perhaps the courses; the reply was it was open to all.

Thanks to Peter was then given for the much appreciated background work that he does in getting the Skills night up and running.

Election of President

Carl, G3PEM was then asked to do his last duty as president as he was standing down. Carl proposed Tony, G4YTG who agreed to take on the role of President; this was seconded by Peter, M0PSD and was agreed by a show of hands. Tony was duly elected and presented with the chain of office. Carl continued with the election of a vice President Murray, G6JYB, as John, G8DET was standing down. Proposed by John, G8DET and agreed by a show of hands.

Certificates for 'Distinguished Service' were then presented to Carl and John for their outstanding work.

Election of New Committee for 2015 – 2016 (see table overleaf)

The Committee stood down and Tony, G4YTG took the floor in his new role to elect a new committee for 2015-2016.

All duly agreed by a show of hands.

Constitution

Murray reiterated the two constitution changes previously mentioned in the newsletter, that modified the financial year to allow the treasurer to get the books audited in time for the AGM, and to clarify the fact that you do actually cease to be a member if you do not pay the subscription by January 1st.

Committee Members Summary	Proposer	Second
Chairman		
Chris Chapman, G0IPU	Carl, G3PEM	John, G8DET
Treasurer		
Peter Davies, M0PSD	Colin, G0TRM	John, M0VRS
Secretary		
Colin Page, G0TRM	Carl, G3PEM	Peter M0PSD
Membership Secretary		
Chris Boon, 2E0CUU	Peter M0PSD	Carl, G3PEM
Other members		
Andy Chapman, G7TKK David Davis, G3SVI Myra Davis, M0MYR Oliver Prin, M0WAG Paul Gledhill, G7BHE Ray Shaves, M6GVE Steve Webb, G4GHO		
CARS Duties		
Programme Secretary		
Colin Page, G0TRM		
Committee Minute Secretary		
tbd		
Club Callsign		
Colin Page, G0TRM		
Training Manager		
Peter Davies, M0PSD		
Raffle Organiser		
Carl Thomson, G3PEM		
QSL Manager		
Oliver Prin, M0WAG		
Essex Chronicle & Weekly News Liaison		
Colin Page, G0TRM		
Publicity & RadCom Liaison		
Trevor Hawkins, M5AKA		
Members of the Public Contacts		
David Davis, G3SVI Myra Davis, M0MYR		
Website		
Murray Niman, G6JYB John Bowen, G8DET		
Newsletter Editor		
Steve Webb, G4GHO		

Murray then went to ex-officio members President and Vice President's voting rights within the committee, but as members of the society. Proposed by Carl, G3PEM and seconded by Chris, 2E0CUU.

Both changes agreed and adopted by a show of hands.

AOB

The assembled membership was asked what the society could do for them.

One question was raised on publicity and event planning; Murray reported that details are on the website, but it may need a little clarification on the home page as to how you get there. The question of whether training course attendees get a newsletter was raised, and the answer is no. You are encouraged to join the Radio Society whilst on the course, but it is not mandatory. Our new newsletter editor commented that perhaps the newsletter could be more available as a publicity advert to prospective new members. This was tried in the past to the detriment of the paying members, as some found that not renewing their membership still gave them the benefit of a newsletter. Commercial interest in the tabletop sale was commented on, but the Society did receive a 10% donation on some sales. Clive's SK sale of Radio Equipment was asked about; Murray reported that more information will be available at the Essex Repeater Group AGM. It was reported that the website had a broken link to the Skills Night publicity; this was checked after the meeting. Clive, M0GHH asked if a trip to GCHQ could be arranged and John, G8DET commented that this was not easy. I commented that perhaps Bletchley Park may be possible, Jodrell Bank was suggested, but – a bit to far for a day trip.

Next came a plea for help in the rebuild of the 2MT transmitter from Peter, M0HBY. He reported they now have the valves, but was really looking for a rheostat with a flat bottom, about 7" long, with a value of around 10 Ohms (made in around 1922...) It was suggested that a wanted parts list could be made up for circulation to the membership.

Raffles

Carl ran the raffle with a Baofeng Handheld Radio as the top prize (if you needed one) and tools, Raspberry Pi and much more.

Review of the year

John Bowen next gave a review of the year in pictures from the last AGM.

November: RAYNET, Presented by Roland, M0BDB, displaying equipment and presentation of the CARS Mug.

December: Christmas social with mince pies and stolen. Tony played the organ as entertainment, G8ADX supplied some slides about Marconi at Poldhu, Cornwall and Murray ran a quiz.

January: a presentation on contesting and QLS awards collecting by Carl. John the showed a picture of a 1940 radio being operated by John, G1UZZ, the radio being rescued from a house in Danbury by Colin John and Richard Creek. Now on display in the museum here in Chelmsford.

Also the club did the RNLI fund raising where James 2E1GUA organised the two day event. Next was a slide on Geoff Bowles' retirement as curator of the Sandford Mill Museum.

February: Probing the Northern Lights by Dr Brendan Goodbody with lots of northern lights pictures (G0IPU missed this).

March: The GB3VHF Story By Chris Whitmarsh, G0FDZ showing the equipment here at the club. Next was Museum of Power event where James, 2E1GUA organised the radio station for their 'Science Week'. Next was a Galleywood Common event by Charlie showing the aerial farm that can be set-up. See [GB1STG](#).

April: Raspberry Pi talk by Peter Onion, G0DZB & David Whale. A well attended meeting. Next was the International Marconi Day station in Sandford Mill. See CARS [IMD](#).

May: Operating Portable by Charlie Davy, M0PZT good practical information given out on the art of portable operation. John then showed his Lusitania presentation set up at Sandford Mill. Peter, M0PSD was mentioned in regard to his input on the equipment side of the Society.

Next up was pictures of a garage sale for Geoff, G3EDM's SK equipment. A busy day. The pictured moral was "don't hoard junk..."

June: The Bodger's Guide to Microwaves By John Worsnop, G4BAO

July: Evolution of Submarine Cables By Bernard Logan. John reported that he needed an overdraft of £125m (and still smiling) and a good accountant – his wife.... On a personal note, John, G8DET showed a picture of his final move from Danbury.

August: Constructors Competition by CARS Members. Charlie, M0PZT the winner with logging software, Bruce, M0XBS second with a valve audio amplifier and Peter, G3SUY with a mobile HF antenna arrangement. Another Sandford Mill event where Murray setup a waterfall display in the Marconi Hut for the public to see.

September: Table Top Sale by CARS members & visitors coordinated by Colin, G0TRM. John showed the visitors from Loughton & Epping Forest ARS - Marc, G0TOC, and Carl on the raffle table and visitors from Ipswich. A round of applause was given to Colin for the organisation and coordination of the event, Colin noted he had still not got his CARS mug for the evening - this was duly rectified by G0IPU. Next was the a picture of the outside event at Sandford mill showing a 70' crank-up mast used on 2m and the young people driving radio controlled cars that had 2.4GHz fast scan TV link to truly remotely drive them. Next a picture of Pete, M0PSX from which John mentioned that Pete's idea of the skills night blossomed into what it is now, with mention of all the activities that take place on these evenings.

October: See above :0)

Colin did get his CARS mug – many thanks all.

A different sort of mug, and an electrical analogy
Ed.



John, G8DET, giving his 'Year in Brief' report.



See over the page for presentation pictures. **Ed.**



AGM Presentations

"Everybody has won and all must have prizes."

(The Dodo's verdict from Alice's Adventures In Wonderland)





Peter Davies, M0PSD

Having taken over as Training Manager for CARS, I thought I had better introduce myself. Training comes naturally to me, as I have trained people all my life to City & Guilds standard in the industry I worked in before retirement and I had been part of the CARS training team, even before I got my full licence. I enjoy seeing new amateurs succeed in achieving their licences; it makes it all worthwhile.



I have always had an interest in radios, but it was not until I had time on my hands that I did anything about it. I took my foundation course & exam at CARS in Feb 2012, the Intermediate in May 2012 and my full licence in July 2013.

I was instrumental in suggesting and starting the Intermediate Practical workshops, giving people at other clubs the chance to complete their practical assessments with us, but then sit their exam at a place of their choosing.

Thursday the 29th October sees the start of the Advanced revision course, with the exam taking place on the 7th December. This date is also available for Intermediate exam, but places are limited.

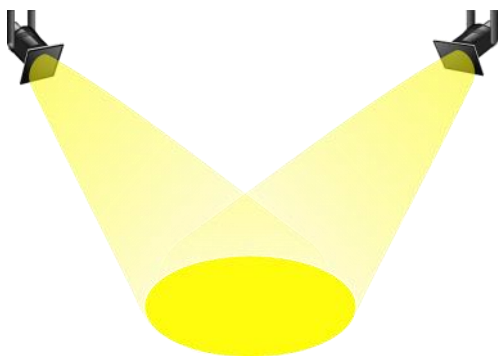
The next Intermediate practical workshop is on both the 18th & 25th November, at Waters & Stanton, in Hockley. Places are still available. Please see details and application form at the end of this newsletter.

I am trying to somehow bond the clubs in Essex in a common objective 'The Hobby of Amateur Radio'

16th January 2016 sees the start of our next Foundation course, which runs for six weeks. Names & details are already being taken for this one.

Also our next Intermediate course which runs for 12 weeks commences on the 17th March 2016. Again, names and details are already being taken.

Peter.



Chris Boon, 2E0CUU

As your new **Membership Secretary**, I would like to introduce myself and issue a gentle reminder. It's that time again when membership renewals are due. As from the AGM, there is a new way of renewing your membership - online, using PayPal (whereby you can use

your credit card). You may also still pay by cheque or cash, but please remember that whether paying by PayPal or cheque, you must use your name & callsign; that is essential, as otherwise we may not know who is paying us!

If paying by cheque, please remember to include a stamped addressed envelope to receive your membership card.



I will also be at my desk at Oaklands Museum on club and Skills nights, if you wish to renew then.

We currently have 85 members including honorary members signed up for 2015/2016 of which ten are new members and four are M6s (three of those four are from the last foundation course).

Chris.

Science & Discovery Day**Sandford Mill, 27th September 2015**

The day started early and bright on the 27th September. CARS were at Sandford Mill helping to promote their [Science Discovery Day](#). I had assembled all the equipment (apart from that bit you always forget...) the night before at home, ready to load up in the morning. Then a quick stop to get the trailer with the 70' Hilomast and we were on our way. Arriving at 8:30(ish) to setup before the public came in, we quickly got the Diamond X500 antenna up on the mast, but that's when it hit me - the bit you forget - you know, the radials/ground plane etc. - all back home. Fortunately, I don't live too far away and retrieved the missing part in around 30 minutes.



Up went the event shelter next to the mast, then the mains power that was still in the ground from an event I did with the Scouts some 11 years ago and it worked (unlike my extension lead, which was replaced). By this time the public were on site and we got the 2m station running. The radio controlled cars were on charge and the [Morse Mouse](#) was ready to pounce. All we needed was a cup of coffee and all would be well in the outside encampment. Coffee was duly fetched and off we went on to 2m. We used the new Yaesu FT-7900 dual band radio.

Later on Jim, 2E0RMI joined us outside along with Kris, 2E0SSX, both having a go on the 2m band with great success. Peter, M0PSD joined us for a break from the Marconi Hut that was in use for HF SSB and CW contacts. Later on Andy, G0IBN popped out to see the 2m setup while SSB contacts were being made on HF.

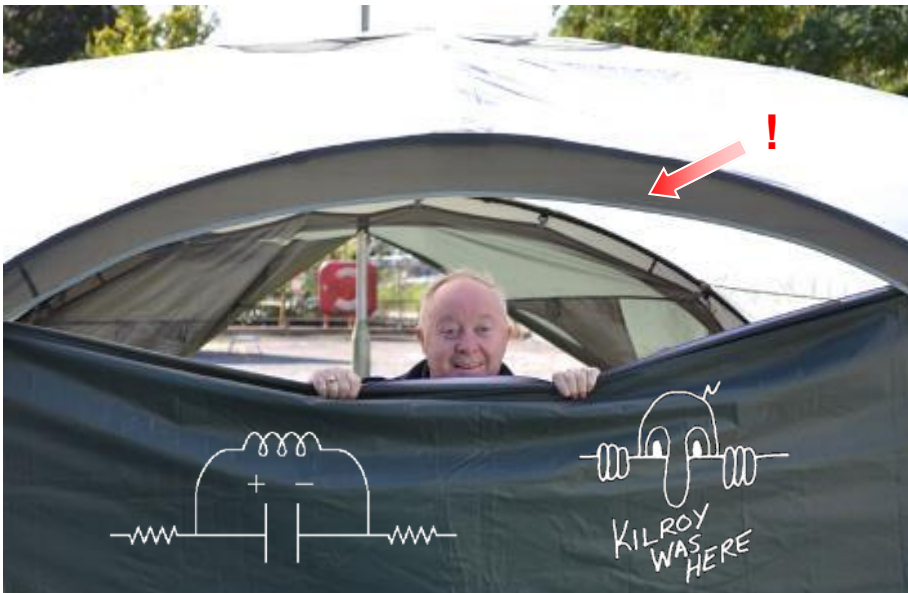


After lunch, I used one of the RC cars to attract a crowd over to the event shelter from the picnic area (let them finish lunch first) and was duly mobbed by a group of young people.

Back on 2m the activity was going strong, with stations from all round Essex calling. Andy, G7TKK set up an SDR arrangement on a laptop PC to show the waterfall display, always a good eye-



catcher, and had quite a lot of interest in the setup from the public. Inside the Marconi Hut, Peter M0PSD and Chris, 2E0CUU along with Andy, G0IBN on the CW Key along with Keith, G3WGE and Oliver, M0WAG were up and running on HF. Sharing the operating time with both SSB and CW operators for the day. Peter M0PSD was at the CW Keys stand for a while. Brian M6UHN popped in to have a go on HF and mad his first HF contact other than on the radio course, well done Brian. At the end of



Not just there for the coffee, then?
Ed.

Heads down, and camera shy. Are this lot hiding something?
Ed.

the day all was packed up and taken home after a very successful day. Thank you to everyone who took part in the event, Nick, the curator was very please with the overall show from CARS.





Training?

Chris, G01PU at the Museum of Power, at Langford helping to keep young Simon in check as he ran wild with his redesign of the published circuit to launch flying saucers.

He was absolutely fascinated (so was Chris!) by the Maplin sourced kit and soon found out how to re-jig the circuits. With a little more patience, opportunity and application, children such as this could probably be helped to develop a long standing interest.

The older children had a better feel for what to do, but they were a bit more influenced by the cars. It seems that, amongst the young, hand-eye co-ordination skills hold sway over a more measured, cerebral approach to entertainment.



Conditions were not so good for the camera cars, as the sun was so bright and the screen low in the tent, but the drivers kept Chris busy with his verbal marshalling techniques - "mind that gentleman's ankles"; "not too far"; "slower!" etc., etc. Nothing to be said about lady drivers, of course.

Ed.

CARS' attendance at the MoP at Langford resulted in some good feedback, according to Debbie Thomas, Museum Visitor Experience manager. Peter, M0PSD and Oliver, M0WAG manned the radio station whilst Chris, G0IPU kept young (and some not so young) visitors happy with his radio controlled camera cars and electronics kit.

The conditions were great—sunny, with a light breeze and there was plenty of passing 'trade'.

If we hadn't had some appalling propagation conditions to contend with, then the feedback on radio operation may well have been even more enthusiastic.

There was hardly a wanted signal to be heard on the HF bands—this, with a Comet CHA-250BX II antenna up at 20m. There was an inordinate amount of QRM/QRN, reaching S9+20dB on 80m and anything up to S9 on 40m. Eventually, the VHF/UHF antenna was erected in place of the Comet and some QSOs were made.

Tests afterward at the editor's QTH showed there was nothing mechanically or electrically wrong, so we will have to investigate a way to improve this, or try alternative configurations.

Ed.



Editor's note: *It is only by attending some of these events and the likes of Skills night at setup/takedown that you get to appreciate the work that goes into it. The packing, loading and unloading of cars, setting up tables and displays, erecting and dismantling antennas, cranking masts up and down etc. is not done by the fairies! (No personal slights, please...)*

*Those who just turn up to attend meetings and events with no intention of helping might like to consider this and offer a hand in future! **Ed.***

Keeping in touch: John, G8DET received this email recently

Hello John,

Thought I would get in touch and say thanks for the CARS newsletters.

Been a busy summer – I retired as manager of the Lizard Wireless Station GB2LD – time had come to let go. But found more busy than ever with home and garden.

I had a Kenwood TS-850 and PSU at the Lizard and a Kenwood TS-870 at home and traded both in for a TS-590S which is brilliant – in the bad conditions I have worked every continent, CW of course. Unfortunately the electronic keyer packed up so the rig is in for repair. I think the earth contact on the jack plug socket became open cct. and they will have to change it (in the old days I could have done this myself by cleaning and adjusting the contact).

I worked GX0MWT over the weekend and was delighted with the signal report and comment from Andy. I was using only 5 watts as the Kenwood was being repaired. Not bad - Poldhu to Sandford Mill CW; especially as he had a small pile up at the time.

I am putting together articles written by others plus my own contribution about Marconi's yacht Elettra – will let you have a copy when complete.

Hope you are keeping well.

Best wishes, **David, G3PLE**

And news of John Macrae, M0IDA

John took the straight route to a full UK licence. He took all three exams: Foundation, Intermediate & Advanced on the same day.

John already holds a USA licence and a Maltese reciprocal licence but, being a British National, wanted to complete his UK licence for use when he is here in the UK.

After enquiries to the RSGB, he found out he had to complete his practicals to enable him to sit his exams. He then contacted CARS to see if we could help.

Being in England for only 2 weeks in May, his practicals were carried out by Peter, M0PSD and were taken at Skills Night, a Thursday training night at Danbury Village Hall and finished off at Peter's home before he returned to Malta.

John had arranged with the RSGB to take all three exams on 19th August at Bath and passed with distinction to receive the call **M0IDA**.

Well done to John. He calls in to see us when he is about in England.

Peter, M0PSD

Skills Night

Hosted by the CARS Training Team, on Monday the 19th of October, was another popular event with over 60 people attending, several from afar. The latter included the Cambridge area, but especially notable was Colin Redwood, G6MXL, visiting from the Poole Radio Society in Dorset. Skills is both a social occasion as well as an evening with a variety of demos and hands-on opportunities. This month, the evenings activities included:-

Construction – Peter, M0PSD and Steve, G4GHO were offering 2m and 70cm Slim Jim antenna and 2 metre dipole construction and adjustment. The rear Hawkins room was busy with practical stuff! - inc patch lead construction, tools and soldering.

CARS – The CARS table had club information on display with new Membership Secretary Chris, 2E0CUU handling subs/renewals. New this month was a timed challenge for how fast to tune a VHF dipole (based on the Foundation course practical and a MFJ analyser..)

Essex Ham – This month the Essex Ham table had a playback of the new RSGB Youth video (running on a RasPi from the ERG AGM Raffle) and a nice demo of PSK31. **See also this, the latest update from Essex Ham:** www.essexham.co.uk/news/more-ways-to-get-essex-ham.html

Essex CW Club – As ever, helping to promote and encourage the Morse mode had a collection of keys on display.

Portable – 'P the G0DZB Way' – saw Peter Onion giving tips on portable working (as he is an expert with an Elecraft KX3 amongst other things). Peter's sense of humour was also on display....

Radio Programming - Charlie, M0PZT proved to be a popular draw as a wide variety of radios sought his programming skills

D-Star & Satellites – Steve, M0SHQ brought along his satellite kit. Timely, as the new AMSAT-NA FOX-1A had just been launched (and has just got the latest Oscar number - AO-85). Steve also had his D-Star Digital Voice hotspot with him

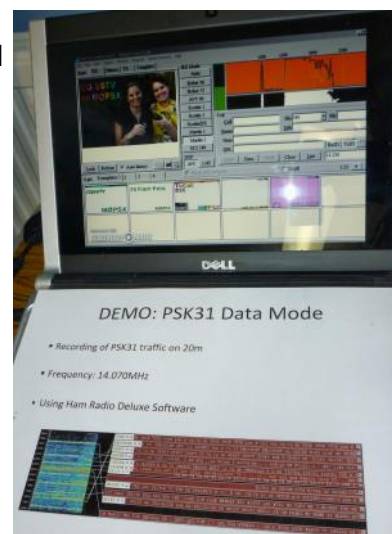
Quiz – Courtesy of some 'interesting' questions from Murray, G6JYB amongst others, Chris, G0IPU challenged the audience with some topical questions, and then finished on another anagram from Pete, M0PSX.

Local club representatives included CARS, Essex RAYNET, Essex Repeater Group, Essex CW Club and Essex Ham, so if you ever go along there is often someone on hand to help with questions.

Antenna Design – Andy Chapman, G7TKK (brother of Chris, G0IPU) returned with his novel antennas based on slinkies. Andy has also become a dab hand at 4NEC2-based antenna modelling. One of his deployable 'umbrella' antennas was on display along with an animated 3D model of its geometry and radiation pattern (play the video)

Callsign Badges – Jim, 2E0JTW and Glynis, 2E0CUQ had a busy time with their callsign badge engraver fulfilling demand from the new batch of M6s

Thanks as ever to David, G3SVI and Myra, M0MYR for their work in the kitchen, producing copious amounts of tea & coffee.



Miss Ethel May Chinery

CARS were represented on Wednesday 21st October at the funeral of Ethel who passed away on 28th September 2015. Ethel was born on 2nd January 1917 and was therefore aged 97.

She had lived all her life in Writtle, near Chelmsford, working first at Crompton's and then EEV. During this time she used to babysit for Peter Heap, son of Harry Heap, G5HF, late CARS President and in more recent years was his partner in Writtle.

Photographs on display showed Ethel with Peter from an early age!

She often told people she could remember listening to the original transmissions from the Marconi Hut calling 2MT at Writtle on her Father's Crystal Set in 1922.

Ethel was a tremendous fund raiser for Farleigh Hospice and supported Harry in the days when CARS operated Field Days from remote sites by providing breakfast and other foods.

CARS President Tony Gilbey, G4YTG made contact with Peter Heap at the Wake at the Secret Garden and confirmed that Peter was delighted to request OFCOM to allow CARS to have G5HF as the Club Call-Sign.

John Bowen, G8DET.



Members' Ads

Take G8DET's advice - have a clear out; you know it makes sense!

For Sale**Kenwood TL-922 Linear Amplifier**

160m through 10m amateur bands

2KW out for 80W in

In very good condition

With original box (but that is a bit tatty)

Manual included

New valves fitted by W&S in 2015

£750.00 o.n.o.

Co-ax cable:

Used, but in very good condition and tested

Westflex W103**UR-67**

Both types cut to length, at **75p per metre**



Contact Peter, M0PSD

Tel: 01268 767112

m0psdradio@btinternet.com

For Sale**JPS Communications NIR-12****Dual DSP Noise & Interference Reducer**

Including user manual

See manufacturer's blurb below.

£50 o.n.o.

Contact John, G3WCO

g3wco@idnet.com or 01279 876607



The **JPS NIR-12** is a professional grade *dual* DSP noise and interference reduction unit. It can eliminate or reduce most types of interference from voice, CW and data transmissions. The employment of *dual* digital signal processors provides simultaneous bandpass operation, noise reduction and multiple tone/heterodyne removal. The notch filter function operates in 5 milliseconds or less. Easy to use front panel has easy-to-use controls provide manual or automatic operation.

There are rear panel jacks for headphone (¼ inch), speaker out (RCA), line out (RCA), audio input (RCA) and 12V d.c. input (tip pos.)

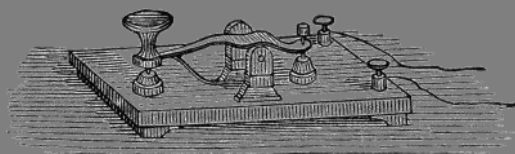
Physical: 7.8 x 1.8 x 7.2 inches, 3.8 lb. Requires 13.8VDC at 1 Amp.

Wanted

Items for this newsletter. It doesn't matter if it is factual or fantasy, capable or comic. Just send in your news, views and abuse. We'll sort it (and file it if necessary) and reproduce it here on these pages.

Come on—you know you want to!

'Ead 'litter...



Silent Key - G3EDM

For sale on behalf of G3EDM estate

Ten-Tec Omni Model 563 V1

HF Transceiver with matching PSU
and operator's manual

Frequency Range: 160m through
to 10m **£350.00 (o.n.o.)**

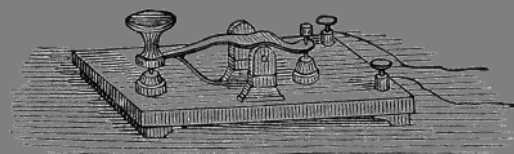


Contact **Peter Davies, M0PSD** Tel 01268 767112, or email m0psdradio@btinternet.com

Silent Key - G1EUC

For sale on behalf of G1EUC estate. Many items have now been sold, but a list of those still available can be found here:

<http://www.g0mwt.org.uk/society/sales.htm>



QRT Sale

ELECRAFT K3/100-F £1400 - 14 months old, and hardly used
(Current Radioworld price: £2220)

DIAMOND GSV3000 PSU £95

(Current Martin Lynch price: £180)

Both items for collection, or plus postage

Contact Andy, G0IBN g0ibn@kersey1.freemove.co.uk

For Sale

KANTRONICS KAM all MODE TNC

Working order when last used.

Boxed with all Manuals and some leads.



£20 ONO.

Colin Page, G0TRM,
colinpage@ukgateway.net

Resonance

Not, perhaps the sort you might imagine would be described in an amateur radio publication, but an interesting experience for me (even if it may be yawn inducing for the readership).

Having responded to Carl, G3PEM's advert for a 5m, 2" pole that was up for grabs, I wondered if I could get it home on my bike. I had a 4m pole in the garage that was waiting to be deployed, so I lashed it to the crossbar as a try-out and it seemed it would be OK.

Now, Carl lives about 3 miles from me and that is no distance at all on a bike but, in the interests of keeping out of the way of traffic on the way home, it did mean I would have to take the cycle routes, negotiate two underpasses and cross Chelmsford town centre. I turned up one Saturday morning to collect the pole and duly lashed it to the bike. In time honoured fashion, I had rags tied to each end of the pole to act as a visibility aid. The pole did seem rather longer and heavier than the one I tested at home, but off I set, walking across the road and heading down the hill from Carl's. As soon as the bike was pointed in the right direction, and heeding the (very) large turning radius required to avoid denting any parked cars, I climbed aboard and set off. I hadn't got more than about 10 yards when the pole, and the bike, set up a violent wobble and the whole thing became totally uncontrollable, with the handlebars being nearly wrenched from my grip.

Those of you who are, or were, motorcyclists, will probably be aware of a phenomenon known as a tankslapper. This, for the uninitiated, is where the front wheel of a motorcycle develops an oscillation that can be anything from a mild shimmy to a lethal conclusion. There is a good (bad?) example of this happening to a rider at the Isle of Man TT many years ago https://www.youtube.com/watch?v=LZ1srcQMa_0 and which has a rather depressing outcome.

I had never quite known what had caused the phenomenon, but here was a ready demonstration of the most extreme example I would ever wish to encounter, where the weight at both ends of the pole wagged in sympathy at, perhaps, a few Hz, way past the steering centre of the bike. Suffice it to say that I very nearly came a cropper and could potentially have taken out a couple of parked cars in the process. Not only that, on the enforced walk home, I found the pole wouldn't quite fit across the turns at the ends of one underpass I had to negotiate and some extra brute force and manipulation was required.

When I eventually got the combination home (which necessitated me holding tightly to the handlebars, even at walking pace and watching people giving me plenty of space in Chelmsford Town centre) I found the pole was, in fact, 6.1m long and somewhat thicker walled than the one I had tried out. The extra length and weight accounted for the low frequency resonance.

I know what not to do in future!

'Ead. 'lter



'For your communications badge, you must download the Morse code app.'

A shocking experience

I have a Baofeng BF-F9 2m/70cm handheld that is based on the UV-5R. Recently, I was using the HF rig with some semi in-ear headphones that have a metal grille across the phone outlets. The Baofeng was in its charging cradle monitoring GB3DA with an external antenna connected via an SMA. At one point, I touched the Baofeng's antenna connector and immediately got a definite tingle in my ears.

Both the HF rig and the Baofeng's charger were connected to the same mains outlet (a 4-way extension lead), but the wall-wart for the charger has no earth connection; the 'earth' pin is plastic.

Measuring the voltage between the Baofeng's antenna connector, or charger output common and the HF rig ground, I saw 85V on a DMM.

This was more than likely a static build-up than direct leakage or inductive coupling, but more than enough to give me a right start, and I wasn't going to chance that configuration again! It's strange, as only one of the grilles has any d.c. connection—it reads about 38 ohms to the headphone common. The adaptor and 'phones are pictured. Unfortunately, the wall-wart is an odd voltage, the charger requiring 10V, so I can't use any of the myriad 5V, 6V or 12V adaptors I have lying around that do have metal earth pins. I shall just have to make sure the charger or antenna ground of the Baofeng is connected to the mains earth in some way in future. - **Ed**.



Sandford Mill, October 28th

Geoff Lovegrove, G7KLV and Colin Page, G0TRM were flying the flag at Sandford Mill. Colin was demonstrating the mechanical Morse display and Geoff was showing how to make crystal sets.

The displays are a great attraction for children; using a machine like typewriter, they are able to impress their names in Morse code on to a paper tape. This tape is then fed to a different machine which reads the tape and produces audible version



of the Morse. At the same time a third machine prints out the actual Morse symbols. The children receive both tapes and a decoding chart to take home for further study. The crystal set kits are great to show children how to put together simple receivers and to hear them working. Some of the children could do with slightly longer attention spans though! - **Ed**.

Training Successes

Foundation Course-32

Duration: 3-Sep to 8-Oct 2015

Thirteen candidates took the 32nd foundation course with a 92% indicative pass rate being recorded.

Happy faces were also recorded on multiple CCDs, as massed cameras snapped the occasion.

Well done to those candidates, and to the training team who worked hard to help them achieve their success.



Now for the Intermediate! After the commercial break, see the following pages for information and application forms for the next course run by CARS' training team.



“Your magazine needs...
Input: articles, humour,
pictures, hints ‘n’ tips,
bouquets, brickbats and,
most of all -

YOU”

Chelmsford Amateur Radio Society

Intermediate Practicals Workshop

To be held at



22 Main Road, Hockley, Essex, SS5 4QS

Organised by the 'CARS' training team, but open and available to anyone!

Complete your practical part of the Intermediate Course and have this signed off, ready to take your exam anywhere.

Registered RSGB Trainers and Assessors

The course will be run over two evenings

Dates: Wednesday 18th & 25th November 2015

Time: 7 p.m. - 9 p.m.

Venue: Waters & Stanton, 22 Main Road, Hockley, Essex, SS5 4QS

Cost: £12.50 (if required, the course book will be charged extra at £5.50)

Course cost includes project materials. Intermediate Course books will be required. We can provide these at an extra cost of £5.50

As time is limited, advance preparation is advised and should include awareness of resistor colour code and basic circuit symbols, as these are used in the practicals.

All the equipment and tools needed will be provided by CARS training team

Pre-booking and payment is essential for this two evening course, as places are limited

Please complete the registration form overleaf and send together with a cheque made payable to 'Chelmsford Amateur Radio Society'

For further course information:

Please email Peter Davies, M0PSD training2015@g0mwt.org.uk or call 01268 767112

Registration form for Intermediate Practicals workshop



This is a two evening course:

Wednesday 18th & 25th November 2015, 7 - 9 p.m.

Venue: Waters & Stanton, 22 Main Road, Hockley, SS5 4QS

Name:

Callsign:

Telephone No:

Address:

.....

Postcode: Date of Birth:.....

Email address:

Special needs? Y / N
(Please indicate briefly)

Club affiliated to:
(If applicable)

Course fee: £12.50 + Course Book (if required) £5.50

Total: £12.50 ☐ (Tick as appropriate) £18.00 ☐

Please make cheques to be made payable to C.A.R.S. and send to:

Peter Davies, M0PSD
Marlborough
2 Lynfords Drive
Runwell
Wickford
Essex SS11 7PP
Email: training2015@g0mwt.org.uk

CARS Training: www.g0mwt.org.uk/training